

*JS*  
~~location and means to decompress said particular program for use by the user before or after storage, which use can include display of a particular program including at least some of said substantive displayable information.~~

Claim 2. I claim the access system of claim 1 characterized in that there is one storage medium for storing multiple programs delivered on a schedule over which the user has no control.

Claim 3. I claim the access system of claim 1 characterized in that the programs are stored in a compressed format.

Claim 4. I claim the access system of claim 1 characterized by the addition of program information delivered to and stored at the user's location and means to access said program information.

Claim 5. I claim the access system of claim 4 characterized by the addition of data manager means to allow user to access the program.

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~~Claim 6 (Fifth amendment). I claim a system having multiple programs delivered in a compressed form on [a] one or more delivery media together with program identification data to a user at a given user location,  
at least one of said multiple programs including at least some substantive displayable information [other than~~

~~ASCII text] that may be distinct from a listing of the program  
identification data,~~

the system including:

means at the given user location to record program  
identification data for the multiple programs,

means at the same given user location to access the  
recorded program identification data for the multiple  
programs, means at the same given user location to process the  
recorded program identification data to allow selective access  
to at least one of the multiple programs,

and means for the user to use said at least one of  
the multiple programs, which use of such programs can include  
display of the program including said at least some  
substantive displayable information [other than ASCII text].

Claim 7. I claim the system of claim 6  
characterized in that the multiple programs and program  
identification data are delivered contemporaneously and by the  
addition of means to delay the programs to allow processing of  
the program identification data.

Claim 8. I claim the system of claim 6  
characterized by the addition of data manager means to process  
the program identification data.

Claim 9. I claim the access system of claim 6  
characterized by the addition of data manager means to allow  
the user to access the programs.

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~~Claim 10 (Fifth amendment). I claim an improved system for delivering multiple programs in a compressed form via [a] one or more delivery [channel] channels from a site to a particular user's location without the particular user's control,~~

~~at least one of said multiple programs including at least some substantive displayable information [other than ASCII text] that may be distinct from a listing of the programs allowing access, storage, and/or retrieval thereof,~~

~~said improvement including:~~

~~the addition of means to store at least certain of the multiple programs in compressed form at the particular user's location and means at the particular user's location to selectively access and decompress the programs at that location respectively,~~

~~said access including displaying the programs, which displaying can include the program including said at least some substantive displayable information [other than ASCII text].~~

Claim 11. I claim the access system of claim 10 characterized in that said means to store the programs includes an optical storage medium.

Claim 12. I claim the access system of claim 10 characterized in that said means to store the programs includes computer memory.

Claim 13. I claim the access system of claim 10 characterized in that the programs are compressed in a MPEG type form and means to selectively decompress said MPEG type signals.

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~~Claim 14 (Fifth amendment). I claim an access system having a storage capability with a limited capacity, the improvement including:~~

~~means to store materials in the storage having a limited capacity, overwrite means to automatically overwrite previously stored material including at least some material which has not been previously accessed based on determinable criteria developed from a known set of priorities,~~

~~said known set of priorities which includes at least one priority other than [the currency] updating of [the] existing materials.~~

Claim 15. I claim the system of claim 14 characterized in that said overwrite means includes consideration of available storage.

Claim 16. I claim the system of claim 14 characterized in that said overwrite means includes consideration of the time the program was stored.

Claim 17. I claim the system of claim 14 wherein there are multiple users having a priority and characterized in that said overwrite means includes consideration of the multiple user's priority.

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Claim 19 (Fifth amendment). I claim an access

system having a storage capability for programs, the programs  
subject to an access, storage, and/or retrieval date, the  
improvement including:

means to store programs in the storage area, means  
to automatically allow access for storage of programs in  
previously utilized storage area upon occurrence of a certain  
event other than the accessing of the stored program in such  
storage area, with at least one of said programs including at  
least some of said substantive displayable information [other  
than contained in ASCII text].

Claim 20. I claim the access system of claim 19  
characterized in that said certain event is the arrival of a  
certain time subsequent to the time of a particular program's  
storage.

Claim 21 (four amendments). I claim an access  
system having an ability to reproduce an accessible program  
having frequency related information with a certain intended  
run time of presentation, for a user requiring a different run  
time of presentation,

the improvement including:

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means to select the accessible program from multiple  
programs and means to alter the frequency of the frequency  
related information to automatically compensate for the  
different run time of presentation and thus the certain run  
time of presentation of the accessible program to the  
different run time.

Claim 22. I claim the access system of claim 21 wherein the different run time is determined by the user's interruption of access to the programs.

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~~Claim 23 (first amendment). I claim the access system of claim 22 characterized in that said accessible program would normally terminate at a time certain and characterized in that said automatic means alters the different run time so as to terminate said accessible program at the same time as said time certain.~~

Cancel claim 24.

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~~Claim 25 (Fifth amendment). I claim an access system for multiple programs delivered in compressed form across [a] one or more delivery [channel] channels, the multiple programs include at least one program delivered without a given user's request therefor and a listing which may be separate of the programs allowing access, storage, and/or retrieval thereof, a program data stream, said program data stream including at least some substantive displayable information [other than ASCII text], said access system including: means at the given user's location to select a particular program from said program data stream without off location contact using the listing, means to record said selected program in a data storage media, and means to decompress said selected program~~

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~~For display, said display which can include display of the  
program including said at least some substantive displayable  
information [other than ASCII text].~~

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Claim 26. I claim the system of claim 25  
characterized in that program identification data is also  
delivered for those programs delivered without a given user's  
request,

the multiple programs and program identification  
data being delivered substantially contemporaneously and by  
the addition of means to delay the programs to allow  
processing of the program identification data.

Claim 27. I claim the system of claim 26  
characterized by the addition of data manager means to process  
the program identification data.

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~~Claim 28 (Three amendments). I claim an access  
system having a storage area for programs having substantive  
displayable information, the programs subject to access,  
storage, and/or retrieval by a listing,~~

the improvement including:

means to record at least part of a given program  
having substantive displayable information in the storage  
area,

means to access at least part of said given program  
having substantive displayable information from the storage  
area so as to select reproduction thereof and

~~means to record programs having substantive  
displayable information at the same time as said reproduction  
which recording can include the remainder of said given  
program and/or another program in the storage area.~~

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Claim 29. I claim an access system having a  
decompression circuit and [an] a frequency artifact producing  
circuit, the improvement of [an] a frequency artifact modifier  
circuit,

means to pass programs through the decompression  
circuit and then through said frequency artifact modifier  
circuit, and means to selectively bypass the frequency  
artifact modifier circuit when the frequency artifact  
producing circuit is inactive.

Claim 30. I claim the access system of claim 29  
characterized in that the decompression decoder is a MPEG type  
decoder.

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Claim 31 (First amendment). I claim the access  
system of claim 29 characterized in that the artifact modifier  
circuit is a frequency converter [means].

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~~Claim 33 (Four amendments). I claim an access  
system having multiple channels of substantive displayable  
information and access information for delivery of programs to  
a remote location,  
the improvement including:~~



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~~a data manager, said data manager being located at  
said remote location,~~

said data manager having a memory for storing the  
access information relative to the delivered information  
including information relative to at least one delivered  
upcoming program,

and means for said data manager to selectively  
control access to the substantive displayable information on  
the multiple channels for presentation of said programs which  
can include the display of said at least one delivered  
upcoming program at said remote location.

Claim 34. I claim the access system of claim 33  
characterized by the addition of a data storage for the  
channels of information.

Claim 35. I claim the access system of claim 33  
characterized by the addition of program information relative  
to the multiple channels of information and means for said  
data manager to utilize such program information.

Claim 36. I claim the access system of claim 33  
characterized by the addition of other services and means for  
said data manager to access said other services.

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Claim 37 (Fourth amendment). I claim an improved  
access system for a particular user to access multiple  
programs delivered in compressed form via [a] one or more  
delivery [channel] channels,

at least one of said multiple programs including at least some substantive displayable information [other than ASCII text],

said access system including program information delivered separate from said substantive displayable information to the particular user at the given location,

means for recording multiple programs in a compressed format in a data storage medium at the given location,

means at the given location for the particular user to access said program information and to select a particular program for presentation at the given location,

and means to decompress said particular program for display which can include the display of said at least some substantive displayable information [other than ASCII text].

Claim 38. I claim the access system of claim 37 characterized by the addition of data manager means to allow the user to access the program.

~~Claim 39 (Fourth amendment). I claim a system having multiple programs transmitted in a compressed form via a transmission media with program identification data transmitted to a particular user at a given location,~~

~~at least one of the programs including at least some substantive displayable information [other than ASCII text] that may be other than the program identification data,~~

~~the system including means at the given location for~~  
the particular user to directly access the program  
identification data,

means to delay the programs to allow processing of  
the program identification data, means to process the program  
identification data at the given location,

and data manager means at the given location to  
process the program identification data and to allow the  
particular user to selectively access the programs at the  
given location, which access can include the display of said  
at least some substantive displayable information [other than  
ASCII text],

Claim 40 (Fourth amendment). I claim an improved  
system for a multiplicity of programs transmitted in a  
compressed form on [a] one or more transmission [channel]  
channels,

a listing of the programs to allow the access,  
storage, and/or retrieval thereof also being transmitted,

characterized by the addition including:

means to store said multiplicity of programs in  
their compressed form at a given location,

at least one of said multiplicity of programs  
including at least some substantive displayable information  
[other than ASCII text],

said means to store the programs including an  
optical storage medium which storage can include said at least  
some substantive displayable information,

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~~and means to selectively access a program using the  
listing and decompress the [programs] program from said means  
to store the programs at said given location[, which storage  
can include said at least some information other than ASCII  
text] for display.~~

Claim 41. I claim the access system of claim 40  
characterized in that the programs are compressed in a MPEG  
type form and means to selectively decompress said MPEG type  
signals.

Claim 42. I claim the access system of claim 40  
characterized in that there are a number of sets of  
multiplicity programs that can be selectively stored.

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~~claim 43 (Two amendments). I claim an improved  
access system for substantive displayable programs delivered  
via one or more delivery channels, a listing of the programs  
allowing the access, storage, and/or retrieval thereof also  
delivered.~~

said access system including:

a program data storage, said program data storage  
recording at least selected ones of the delivered programs,

a user control, said user control selectively  
retrieving said selected ones of the delivered program from  
said program data storage using the listing,

and said program data storage simultaneously  
~~recording other selected portions of the delivered programs as~~

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~~said selected portion of a substantive displayable program is  
being selectively retrieved by said user control.~~

Claim 44. I claim the access system of claim 43  
characterized in that said selected portion and at least one  
of said other selected portions are from the same program.

Claim 45. I claim the access system of claim 43  
characterized in that said selected portion and at least one of  
said other selected portions are from different programs.

Claim 46. I claim the access system of claim 44  
wherein the program of which said selected portion is a part,  
said program has a normal presentation conclusion  
time from initial retrieval and characterized in that the  
retrieval of said selected portion can be selectively  
interrupted by the user for a period,  
any retrieval of said selected portion can be  
accelerated to compensate for said period, and said  
acceleration allowing the program to end at the normal  
presentation conclusion time.

Claim 47. I claim the access system of claim 46  
wherein the program has a frequency and characterized by a  
frequency shift means,  
and said frequency shift means altering the  
frequency of any accelerated portion to be substantially equal  
to the frequency of the program.

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~~Claim 48 (Third amendment). I claim an improved access system for programs transmitted via one or more transmission channels, and a listing of the programs allowing the access, storage, and/or retrieval thereof.~~

said access system including:

a data manager, said data manager being located at a particular user's given location,

a data stream, said data stream passing via a delivery channel for recording in said data manager,

a user control, said user control allowing access to the data in said data manager using the listing of programs,

a program data storage, said program data storage recording at least some of one or more of the programs transmitted on the transmission channel without any active selection by the user,

at least one of said programs including at least some substantive displayable information other than [ASCII text],

and means for the user at said given location to use [the] data in said data manager to retrieve selected portions of the programs in said program data storage via the listing thereof, which retrieval can include the display of said at least some substantive displayable information [other than ASCII text].

Claim 49 (First amendment). I claim the access system of claim 48 characterized in that said data stream includes information of upcoming substantive programs.

Claim 50. I claim the access system of claim 48 characterized in that said user control can be selectively programmed to automatically record programs in said program data storage based on the data in said data manager.

Claim 51. I claim the access system of claim 48 characterized in that substantially all of the programs transmitted on a transmission channel at transmitted without any user's control.

Claim 52. I claim the access system of claim 51 characterized in that the programs are substantially continually transmitted.

Claim 53. I claim the access system of claim 48 characterized in that said program data storage can record programs and the user can retrieve a program from said program data storage at the same time.

Claim 54 (One amendment). I claim the access system of claim 48 wherein the program of which said selected portion is a part, has a normal presentation conclusion time from initial retrieval and characterized in that the retrieval of said selected portion can be selectively suspended by the user for a period of time,

any retrieval of said selected portion can be automatically accelerated to compensate for said period of time,

and said acceleration allowing the program to end at the normal presentation conclusion time.

Claim 55. I claim the access system of claim 54 wherein the program has an original frequency and characterized by frequency shift means,

said frequency shift means altering the frequency of any accelerated portion to be substantially equal to the original frequency of the program.

~~Claim 56 (Third amendment). I claim an improved~~

access system for programs transmitted on one or more transmission channels, said access system including:

a data manager, said data manager being located at a particular user's given location,

a data stream, said data stream passing via a delivery channel for access at the direction of said data manager,

a user control, said user control allowing access to the data in said data manager,

a program data storage, said program data storage recording at least some of one or more of the programs transmitted on the transmission channel without any active selection of individual ones of the specific programs by the user,

at least one of said programs including at least some substantive displayable information other than [ASCII text] listing data.



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~~and select means at said given location for said~~  
data manager to use the listing data in said data manager to  
automatically record selected portions of the transmitted  
programs in said program data storage, which recording can  
include said at least some substantive displayable information  
[other than ASCII text].

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Claim 57. I claim the access system of claim 56  
characterized in that said select means is programmed to  
discard programs recorded in said program data storage  
including programs not yet retrieved according to a known set  
of priorities.

Claim 58. I claim the access system of claim 57  
characterized in that said known set of priorities includes  
the available recording room in said program data storage.

Claim 59. I claim the access system of claim 57  
characterized in that said known set of priorities are ranked  
in an order of preference.

Claim 60. I claim the access system of claim 56  
characterized in that said known set of priorities may be  
changed from time to time.

Claim 61. I claim the access system of claim 55  
characterized in that said select means is programmed to  
record transmitted programs in said program data storage  
according to a selection algorithm.

Claim 62. I claim the access system of claim 60 characterized in that said selection algorithm includes one or more of consideration of the desirability of the program to the user,

the number of users for a program, the time of the program, the relation of the program to programs previously stored, the content of the program, the particular channel for the program and/or the availability of removable storage.

Claim 63. I claim the access system of claim 61 characterized in that said select means is programmed to discard or record over previously recorded programs in said program data storage including not retrieved programs according to a known set of priorities.

Claim 64. I claim the access system of claim 63 characterized in that said known set of priorities includes the available recording room in said program data storage.

Claim 65. I claim the access system of claim 63 characterized in that said known set of priorities are ranked in an order of preference.

Claim 66. I claim the access system of claim 63 characterized in that said known set of priorities may be changed from time to time.